

Joseph Slagel - Early Fairbury Inventor

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Joseph was born Feb 12, 1883, on a farm south of Fairbury. He was the son of Rev. Samuel Slagel and Mary Demler Slagel. His father was of German descent and was born in Iowa. His mother was from Switzerland.

He had a little brother Samuel who died when he only 4 years old. Another brother Daniel died in 1967. Sister Emma died in 1961.

In the 1900 U.S. Census, Joseph was age 18 and was living at home with his parents, his sister Emma, and brother Daniel. The father's occupation was blacksmith and farmer. Joseph's occupation was a farm laborer. Other sources noted that Joseph had an outstanding mechanical aptitude as a child.

When he finished country school, his father let him build his own shop on the father's farm. In September 1903, he moved to town and set up his own machine shop. His machine shop was at the northwest corner of Sixth and Locust street. The machinery in his shop included lathes, drilling machines, planers, and milling machines. At the time, it was one of the best-equipped shops in Central Illinois.

On Aug. 10, 1905, at the age of only 22, Joseph filed for a U.S. Patent on a lubricator for steam engines. Steam engines had lots of moving parts that needed constant lubrication. His invention used a pump to force the lubricant to where it was needed. On Sept 25, 1906, U.S. Patent number 831,899 was granted to him.

On May 24, 1906, at the age of 23, Joseph married Emma Wagler from Davis, Iowa. She was 21 years old.

In the 1910 U.S. Census, we find Joseph and his wife Emma married and living on Locust Street (Main Street) in Fairbury. His occupation is the proprietor of a machine shop.

The Sanborn Insurance Company made maps of Fairbury between 1885 and 1911. The 1911 Sanborn map shows Joseph's machine at the northwest corner of Sixth and Locust Streets. The Sanborn map shows he had a 50-gallon gasoline tank, electric lights, and steam heat from the boiler. The gasoline tank was to fuel the gasoline-powered engines he was manufacturing.

Joseph manufactured hit-and-miss engines in his machine shop. They are a type of four-stroke internal combustion engine that is controlled by a governor to operate at a set speed. It was conceived in the late 19th century and produced by various companies from

the 1890s through approximately the 1940s. The name comes from the speed control on these engines: they fire ("hit") only when operating at or below a set speed, and cycle without firing ("miss") when they exceed their set speed. This is as compared to the "throttle governed" method of speed control. The sound made when the engine is running without a load is a distinctive "POP whoosh whoosh whoosh whoosh POP" as the engine fires and then coasts until the speed decreases, and it fires again to maintain its average speed.

Many engine manufacturers made hit-and-miss engines during their peak use—from approximately 1910 through the early 1930s when more modern designs began to replace them.

Joseph needed a source of castings to make his gasoline engines. The 1885 Sanborn maps show the existence of the Kring Foundry just west of Dave's Supermarket. Lafayette Kring ran the Kring Foundry in Fairbury. At least four buildings on Locust Street have vertical door trim pieces made in the Kring Foundry.

In 1911, early Fairbury plumber, C.B. Day, was featured in a story in the weekly issue of the Metal Worker, Plumber, and Steam Fitter magazine. He was featured in this trade magazine because of his unique marketing method. At the Fairbury Fair, he set up displays. For the city ladies, he showed the latest in indoor plumbing items. For farmers, he demonstrated easier ways to get water for the farm. He featured water pumps powered by Midget engines from the Fairbury Motor Works, which was Joseph Slagel's company.

In 1913, at age 30, Joseph was a brilliant young man. He received a patent when he was only 22 years old. He had his own machine shop, Fairbury Motor Works, making hit-and-miss Midget engines. He was also listed in the *Automobile Trade Directory* for his Fairbury Motor Car Works. He may have had aspirations to make complete automobiles.

Unfortunately, in 1913 Joseph started to experience serious health issues. He placed an ad in the *Thresherman's Review* magazine to sell his Fairbury machine shop. In 1914, the Blade reported that Joseph Slagel was confined to his house with a nervous breakdown. It was hoped that the much-needed rest would restore him to his usual activities. On September of 1914, at age 31, Joseph and wife moved to a ranch in Miesse, New Mexico.

Many early cars used acetylene gas at high pressure to power the headlights. This was called the Prestolite tank and/or generator. Joseph owned such a vehicle in New Mexico. In 1915, Joseph was killed when this pressurized gas system blew up his car. Because these acetylene systems were so dangerous, they were replaced in a few years by electric lights.

Joseph's body was returned to Fairbury. There was a large funeral at the German Apostolic Church. He was buried at Graceland. His wife never remarried. She moved back to Iowa and died in 1927 at age 42. She is buried in Chariton, Iowa.

In 2016, a collector of hit-and-miss engines in Iowa came across a Midget engine from Fairbury Motor Works. He contacted this reporter seeking historical information about the motor. The collector bought the engine and sent photographs of the engine. There are believed to be only five of these engines left in the world. Two of the engines are in Fairbury, one in Iowa, and two are in Indiana.

Joseph Slagel was a young man with a great deal of promise. It was regrettable that he only lived to be 32 years of age.



Jos. Slagel

Portrait of Joseph Slagel from 1909 Volume 2
Livingston County History Book